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ABSTRACT

Since the brain is generally thought to be the "center of learning," having a working knowledge of its functions is essential to effective teaching. In light of this, the "neuroeducator," as defined by researchers, provides a framework for reviewing areas of teacher education in need of observation, remediation, and reconstruction. To support necessary changes, teacher training institutions might want to become more selective and only accept into their programs the top 2 to 16 percent of national academic achievers. Also, educational training programs should include basic anatomy and biological sciences as requisite coursework, making an understanding of the neurological system a must. Another aspect to be considered is curriculum design in terms of matching prescribed educational requirements commensurate with the developmental levels identified and verified by research data. In addition, teacher candidates could enter the job market as teacher-assistants, following completion of a basic program including elements similar to those outlined for the "neuroeducator," and provisions should be made for refresher and specialization courses for inservice teachers. Recommendations should also be made for extending the school year and altering the composition of school boards to include more parents and professional educators. (JD)

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Making Change...

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"MAKING CHANGE....."

The majority of teacher training institutions are continuing to produce their quotas of students who have 'majored in education' and who are considered as being qualified to 'teach'. Course work requirements for this major usually include some form of exposure to areas of child development, history of education, and the 'methods' of teaching subjects such as language arts, social studies, science and mathematics. Almost all graduated students have taken a course describing the past history and governmental structure of the state in which they are about to become employed. Yet, in a recent personal survey of the educational course requirements for elementary teaching certification in the U.S.A.,[1] there did not appear to be an in-depth course requirement in any one of the fifty states regarding acquisition of an understanding of the specifics of functional components of the neurological system which, according to most medical viewpoints, includes the brain as an integral part. Since it appears that the brain is generally thought to be the 'center of learning', having a working knowledge of how it functions, or is not capable of functioning, seems elementary in terms of predicting, prescribing, or presenting introduction of informative resource materials within an academic environment.

At the graduate level of educational training, other than that offered in Special Education departments, or in areas requiring endorsement for 'specialized' certification, the course-work required in this area appears, if at all, only in departments offering authorization to perform "Special Services", such as 'Communication Science (Speech Departments), or 'Pupil Personnel Services' (Educational Psychology), and other related areas. On the national level, only one school, Teachers College, Columbia University, New York, N.Y., under the direction of Dr. K. Best and Dr. U. Kirk, offers doctoral and post-doctoral work in the field of "Neurosciences". This particular program appears to be the only course of study specifically designed to focus upon the educational and clinical implications of recent advances in understanding the involvement of brain processes in view of their behavioral relationships. Even this offering appears to be designed to create a new 'specialist'--"A professional who can 'bridge the gap' between research on the nervous system mechanisms that underlie language, thought, perception, learning, and skilled activities and issues, theory, and practice in educational and clinical settings."[2] It appears that no attempt has been made by our educational institutions to expose the classroom teacher to this bank of available information, even though it is generally thought that it is the teacher's role to 'exercise the brain' of the student. The knowledge seems to be reserved for the 'specialist' and is considered by many professionals as being 'too powerful' for the regular classroom teacher to behold.

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Marilyn Ferguson in The Brain Revolution cites Erwin Schrodinger, Nobel prize-winning physicist, "Schrodinger feared that it might be fifty years before the educated laymen grasped the implications of modern science; that reality is a convenient fiction. He said, "There is always a certain time-lag between the views held by learned men and the views held by the general public about the views of those learned men." "[3] Considering the initial research of the Pavlovians and subsequent contributions of Kornilov, Vygotsky and Luria in the 1930's, now made available to us through the translated works of the past decade, it seems we may be witnessing an example of Schrodinger's phenomenon as it begins to unfold. Views held by 'learned men' of the relationships between neuropsychological processes and their possible behavioral implications are beginning to be examined by 'educated laymen'. Two questions, then emerge: 1) Are classroom teachers to be included in the group referred to as 'educated laymen', or 2) Will they be withheld from exposure to this information in their teacher-training programs since the implications might be 'too powerful' for them to behold?

In a more recent report, The Aquarian Conspiracy, Ferguson confides, "Of the Aquarian Conspirators surveyed, more were involved in education than in any other single category of work. They were teachers, administrators, policymakers, educational psychologists. Their consensus: Education is one of the least dynamic of institutions, lagging far behind medicine, psychology, politics, the media, and other elements of our society."[4] She advises us that a network has formed of those who are willing "to conspire for the teaching of all they most value: freedom, high expectations, awareness, patterns, connections, creativity.",[5] and..."These networks have an ally in scientific research."[6]

We are beginning to realize, with increasing clarity, how unnatural many of our educational methods have been and why they have worked poorly, if at all. Research in brain behavior relationships and awareness of 'consciousness' demonstrates that teaching must change if we are to tap our human resource potential. Although at present we are being subjected to somewhat austere 'back to basics' and 'testing' movements, the attempts seem to be rather hind-sighted efforts to make amends for whatever it is that has gone wrong in our attempt to provide our society with a valid and productive educational system. An abundance of data lending support to the charges of Ferguson's "Conspirators", an observable amount of documentable 'unrest in the field, and increasing numbers of those willing to become active participants in evoking change, may soon force the antiquated and inefficient teacher training programs and their designs for classroom structures to remodel.

In "Motivations for Teaching", Ornstein observes that "The teaching profession should attract the keenest minds, the finest personalities, and the most humane people. This, of course, does not always happen. Generally, those who enter the profession are average people with average abilities. Many come from working-class and low-income backgrounds and envision teaching as a means of upward mobility."[7] He cites positive motives for entering the teaching profession as... "(a) a love for children, (b) a desire to impart knowledge, (c) an interest in and excitement about teaching, and (d) a desire to perform a valuable service to society. Negative reasons may be (a) job security and pension, (b) relatively short working days and long vacations, (c) the difficulty of preparing for another field, causing a switch to education, and (d) need for income while preparing for another profession (Ornstein & Hedley, 1973;Ornstein & Miller, 1980)."[8] Although motivations for entering the teaching profession may be varied, "the research tends to indicate that most people enter the profession to help young children and provide a valuable service to society."[9]

The "neuroeducator", as defined for us by Cruickshank,[10] provides a framework which might be considered as an acceptable pattern to be utilized in outlining a desirable updated program of study required for those wanting to enter the teaching profession. His suggestions, however, have previously been reserved for the development of a "super-teacher" who would be prepared solely for the special education classrooms and a portion of the concept was offered prior to the implementation of the requisitions imposed by PL 94-142. The idea of sharing the concepts and components of the training programs used for 'specialized personnel' is often thought to carry "too much risk" to safely impart it within regular teacher training programs.

Critical reviews of our school systems as they have operated in the past and continue to function today are many. The difficulty is not to be found in making a critical analysis of our educational process. Specifically defining areas in need of further observation, remediation, and positive re-construction is the difficult task. The five areas reviewed here are meant to be considered within such an ideational framework.

I. Teacher training institutions might want to consider becoming more selective in their acceptance of applicants into their teacher training programs. No longer would colleges and universities accept all eager applicants, regardless of capability, into the teaching profession. A delineation would be made. Perhaps only the top 2%, certainly not less than the top 16%,of the national academic achievers

would be permitted to become fully credentialed 'teachers'. Thus the teacher who currently fantasizes his counter-partnership with the medical profession, yet in terms of financial and personal job security, finds that he has to allign himself with the plumber--joining a union--will no longer be forced to defend himself in defining his 'place in the universe'. He will be described and defined ...as a Teacher.

II. Educational training programs would include basic anatomy and biological sciences as requisite course-work, making an understanding and overview of the neurological system a must. Trainers of teachers, who sometimes like to refer to their prospective products as 'facilitators', might want to think in terms of making the learning facilitator a specialist in determining the inherent ability and achievement levels of each learner. Today's requirements for entrance into Kindergarten or Grade One seem to give the process of 'pre-sorting' less priority than that given to a weekly sorting of laundry items. Pre-school and Kindergarten screening programs developed to assess presence of skills, strengths, and areas in need of further NURTURE might become acceptable as an integral function of our public school system.

III. Adjustment to curriculum design might be considered in terms of matching prescribed educational requirements commensurate with the developmental levels identified, known, and verified by research data. The learning facilitator would be responsible for providing an individualized program of instruction for each child assigned, yet would utilize paraprofessional personnel to implement the mechanics of performing tasks of recall, processing, or application of informative facts. In 1932, Vygotsky observed, "Instruction is one of the principal sources of the school child's concepts and is also a powerful force in directing their evolution; it determines the fate of his total mental development."[11] Certainly, such instruction should be given at appropriately determined stages in order to provide the most lush of intellectual environments and also to prevent inappropriate treatments and subsequent damage to a child's mental development.

IV. Young teacher candidates might be allowed to enter the job market as teacher-assistants, under the tutelage of on-sight 'Teachers', following completion of a basic program in which they have been exposed to the elements similar to those outlined for the "neuroeducator" as perceived by Cruickshank. Such a proposal might bring new ideas, youth and stamina to the classroom. With the combination of both the knowledge and experience of the 'Teacher', the addition of the exuberance of the teaching assistant might also bring about positive by-products in terms of a)less teacher burn-out, b) earlier job entry for the young, and c) less waste of money paid to those tenured, whom we often hear administration referring to behind closed doors as "deadwood".

V. 'Teachers' and their 'teaching-assistants' might want to have rotating systems of school-day attendance. 'Teachers', following initial training of the 'teaching-assistant', might want to have released time--full semester, part-time, half-day, or other--which would then provide the necessary academic freedom in which to attend university classes for refresher and specialization courses, refueling for present and future needs, while the 'teaching-assistants' continue to grow and develop within the profession, being allowed to experience the teaching process within a structured, yet creatively independent spirit of apprenticeship. University and college personnel would then become multi-leveled trainers of professional educators within the system. A more closely scrutinized classroom and educational environment might be brought about by such an arrangement, providing an additional benefit by developing a closer liaison between the local school systems and the colleges and universities; some of whom often appear to keep themselves at 'arms's length' from one another.

The financial rewards of implementation of these suggestions are positive. Teachers today, after spending thousands of hours and dollars taking courses in order to ensure their professionality, do not want to be advised by their administrators, or supervisory personnel, of their incompetencies, nor do they often want to return to their campus where, in order to meet credential and degree requirements, they have had to take classes they generally refer to as the "Mickey Mouse" courses. Fewer yet, once submerged in the job market, are able to attend seminars, workshops, or in-service training sessions whereby they are able to pursue individual areas of interest. Too often the 'supervisors' are the ones who are provided approved funding and released-time to attend such events. Those who do continue their educational interests usually attend night or weekend classes following long, difficult work hours. We are aware that many bright, highly motivated 'leaders' have had to leave the educational profession, frequently taking menial jobs due to lack of appropriate financial reward for effort and time expended in their roles as classroom teachers. The costs of our "educational exodus" have been high and will continue to accelerate unless we begin to seriously consider the need to change this pattern.

In actuality, dollars spent by the taxpayers for administration and supervision of testing programs and school board elections could not only be saved but possibly spent more wisely on other priorities--air conditioning systems, gymnasium and swimming facilities to enhance implementation of summer or 'year-round' programs. School children no longer are needed to be at home during summer months.

to aid in the harvesting of the crops as they were previously called upon to do in our earlier agrarian society. The opinion-based reference from which we now continue to select and operate our local school boards is also an antiquated practice based upon its beginnings when gentlemen were called in from the fields to pass judgment on the newest applicant for 'school-marm'. Few modern companies base their in-house operations upon spending thousands of dollars to hold a popularity contest, entrusting the winners with the management duties of their plant. Certainly, it seems that in almost any operation, monitoring of a system should be enforced by the most knowledgeable of the available professionals. This ongoing practice of election, a most costly and often inappropriate method of selection of monitors so sensitive as that which is healthy and beneficial to the growth and development of our children, seems somewhat not in tune with the 'democratic process' we allegedly uphold. A random sample of almost any local school board elicits the probability that personal need motivators will be manifesting themselves in the form of membership of at least one 'housewife', a professional in need of 'exposure', an advocator of 'the issues', and a minority. Sadly absent will be the professional 'educator', the curriculum expert, the medical advisor aware of the developmental needs of our children. In reference to parental representation, such membership should be included as a priority.

It appears, then, that our educational efforts are in need of reconsideration. Heeded calls for 'back to basics' and 'more testing' have produced neither desirable remediation, nor appropriate reorganization. It was previously inferred that the suggestions made here are not costly. Although monetary issues are not the main consideration, it does seem that this more frugal approach might bring additional rewards in terms of better teachers for better educational processes for less tax dollar. A renovation of education practice IS needed, however, especially at the level of higher education, and specifically within the college and university departments of Education. To spark implementation of such a remedial process, we might recall the phrase Bobby Kennedy often used to conclude many of his own speeches:

> "Some men see things as they are and say 'Why?'.
> I dream things that never were and say 'Why not?' "[12]

Why not make a change? Such change need not be made hurriedly. A pilot evaluation might be initiated whereby an experimental program would be implemented in congruence with a more traditional program. Pre- and post-experiential variables would then be examined in order to determine whether any of the above is or is not credible. The measurement and evaluation of these variables, then, might give some further insight as to the feasibility and validity of the 'why not' approach.

BIBLIOGRAPHY

[1]Initial personal survey of State Department of Education requirements for Elementary Teaching Certification, November, 1982.

[2]Brochure: "Neurosciences and Education," Teachers College, Columbia University, New York, N.Y..

[3]Ferguson, Marilyn. The Brain Revolution, Taplinger Publishing Co., New York, N.Y., 1974, Pps. 19-20.

[4]Ferguson, Marilyn. The Aquarian Conspiracy, J.P. Torcher, Inc., L.A., Ca., 1980, P. 280.

[5]Ibid., P. 281.

[6]Ibid., P. 282.

[7]Ornstein, Allan C. "Motivations for Teaching," Viewpoints in Teaching and Learning, Vol. 57, No. 3, Summer 1981, (Indiana University, Journal of School of Education), P. 65.

[8]Ibid., Pps. 65-66.

[9]Ibid., P. 73.

[10]Cruickshank, William. "The New Perspective in Teacher Education: The Neuroeducator," Journal of Learning Disabilities, Vol. 14, No. 6, June/July, 1981, Pps. 337-367.

[11]Vygotsky, L.S. and Long. Thought and Language, The M.I.T. Press, Cambridge, Mass., 1962, P. 85.

[12]"A Life On The Way To Death", Time Magazine, June 14, 1968, P. 22.